



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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December 4, 2001

Rick Olsen, General Manager  
Canyon Fuel Company, LLC  
P.O. Box 1029  
Wellington, Utah 84542

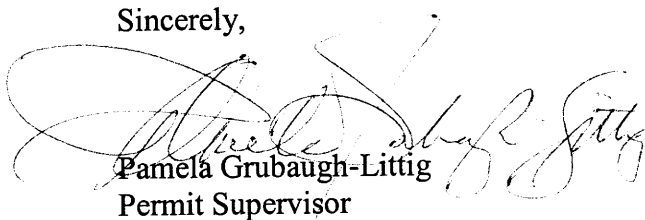
RE: Elimination of Subsidence Monitoring, Canyon Fuel Company, LLC., Soldier Canyon Mine, C/007/018-01B, Outgoing File

Dear Mr. Olsen:

The above-referenced amendment is approved effective November 27, 2001. A stamped incorporated copy is enclosed for your copy of the Mining and Reclamation Plan.

If you have any questions, please feel free to call me at (801) 538-5268 or Stephen J. Demczak at (435) 613-5242.

Sincerely,



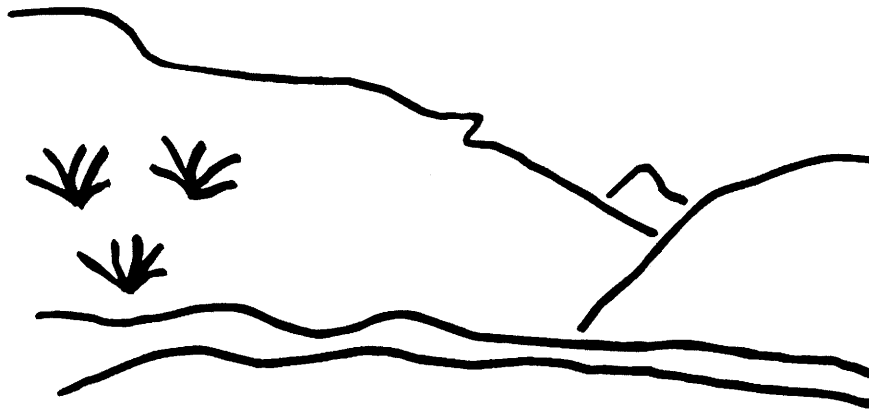
Pamela Grubaugh-Littig  
Permit Supervisor

sjd/db  
Enclosure

cc Joe Wilcox, OSM  
Richard Manus, BLM  
Mark Page, Water Rights, w/o enc  
Dave Ariotti, DEQ, w/o enc  
Derris Jones, DWR, w/o enc  
Steve Boyden, SITLA, w/o enc  
Price Field Office

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# State of Utah



## Utah Oil Gas and Mining

### Coal Regulatory Program

Soldier Canyon Mine  
Elimination of Subsidence Monitoring  
C/007/018-01B  
Technical Analysis  
November 28, 2001

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**INTRODUCTION****TECHNICAL ANALYSIS****INTRODUCTION**

The permittee is requesting to withdraw the requirements of conducting any type of subsidence monitoring at the Soldier Creek Mine until the mining operation commences. The Soldier Canyon Mine has been in temporary cessation since October of 1998. The Mining and Reclamation Plan has given the permittee right to request the withdrawal of any subsidence monitoring point or points which shows no change for two consecutive years. See Page 5-20 in the MRP.

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C/007/018-01B  
November 28, 2001

## INTRODUCTION

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OPERATION PLAN

# OPERATION PLAN

## SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

### Minimum Regulatory Requirements:

#### Renewable resources survey

Include a survey, which shall show whether structures or renewable resource lands exist within the proposed permit area and adjacent area and whether subsidence, if it occurred, could cause material damage or diminution of reasonably foreseeable use of such structures or renewable resource lands. If the survey shows that no such structures or renewable resource lands exist, or no such material damage or diminution could be caused in the event of mine subsidence, and if the Division agrees with such conclusion, no further information need be provided in the application under this section.

#### Subsidence control plan

In the event the survey shows that such structures or renewable resource lands exist, and that subsidence could cause material damage or diminution of value or foreseeable use of the land, or if the Division determines that such damage or diminution could occur, the application shall include a subsidence control plan which shall contain the following information:

- 1.) A description of the method of coal removal, such as longwall mining, room-and-pillar removal, hydraulic mining, or other extraction methods, including the size, sequence, and timing for the development of underground workings.
- 2.) A map of underground workings which describes the location and extent of areas in which planned-subsidence mining methods will be used and which includes all areas where measures will be taken to prevent or minimize subsidence and subsidence related damage and where appropriate, to correct subsidence-related material damage.
- 3.) A description of the physical conditions, such as depth of cover, seam thickness, and lithology, which affect the likelihood or extent of subsidence and subsidence-related damage.
- 4.) A description of monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage.
- 5.) Except for those areas where planned subsidence is projected to be used, a detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage, including, but not limited to: backstowing or backfilling of voids; leaving support pillars of coal; leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving the coal in place; and, taking measures on the surface to prevent material damage or lessening of the value or reasonably foreseeable use of the surface.
- 6.) A description of the anticipated effects of planned subsidence, if any.
- 7.) A description of the measures to be taken to mitigate or remedy any subsidence-related material damage to, or diminution in value or reasonably foreseeable use of the land, or structures or facilities to the extent required under State law.
- 8.) Other information specified by the Division as necessary to demonstrate that the operation will be conducted in accordance with the performance standards for subsidence control.

#### Performance standards for subsidence control

The operator shall either adopt measures consistent with known technology which prevent subsidence from causing material damage to the extent technologically and economically feasible, maximize mine stability, and maintain the value and reasonably foreseeable use of surface lands; or, adopt mining technology which provides for planned subsidence in a predictable and controlled manner. Nothing in this part shall be construed to prohibit the standard method of room-and-pillar mining.

The operator shall comply with all provisions of the approved subsidence control plan.

The operator shall correct any material damage resulting from subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses which it was capable of supporting before subsidence, and, to the extent required under applicable provisions of State law, either correct material damage resulting from subsidence caused to any structures or facilities by repairing the damage or compensate the owner of such structures or facilities in the full amount of the diminution in value resulting from the subsidence. Repair of damage includes rehabilitation, restoration, or replacement of damaged structures or facilities. Compensation may be accomplished by the purchase prior to mining of a non-cancelable premium-prepaid insurance policy.

## OPERATION PLAN

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Underground mining activities shall not be conducted beneath or adjacent to: public buildings and facilities; churches, schools, and hospitals; or, impoundments with a storage capacity of 20 acre-feet or more or bodies of water with a volume of 20 acre-feet or more, unless the subsidence control plan demonstrates that subsidence will not cause material damage to, or reduce the reasonably foreseeable use of, such features or facilities. If the Division determines that it is necessary in order to minimize the potential for material damage to the features or facilities described above or to any aquifer or body of water that serves as a significant water source for any public water supply system, it may limit the percentage of coal extracted under or adjacent thereto.

If subsidence causes material damage to any of the features or facilities, the Division may suspend mining under or adjacent to such features or facilities until the subsidence control plan is modified to ensure prevention of further material damage to such features or facilities.

The Division shall suspend underground mining activities under urbanized areas, cities, towns, and communities, and adjacent to industrial or commercial buildings, major impoundments, or perennial streams, if imminent danger is found to inhabitants of the urbanized areas, cities, towns, or communities.

Within a schedule approved by the Division, the operator shall submit a detailed plan of the underground workings. The detailed plan shall include maps and descriptions, as appropriate, of significant features of the underground mine, including the size, configuration, and approximate location of pillars and entries, extraction ratios, measures taken to prevent or minimize subsidence and related damage, areas of full extraction, and other information required by the Division. Upon request of the operator, information submitted with the detailed plan may be held as confidential.

### Notification

At least 6 months prior to mining, or within that period if approved by the Division, the underground mine operator shall mail a notification to all owners and occupants of surface property and structures above the underground workings. The notification shall include, at a minimum, identification of specific areas in which mining will take place, dates that specific areas will be undermined, and the location or locations where the operator's subsidence control plan may be examined.

### Analysis:

#### Subsidence Control Plan

The Mining and Reclamation Plan for the Soldier Canyon Mine states, "The subsiding areas which show no change for two consecutive years will be considered stable and will be omitted from further annual surveys". This statement is on Page 5-20 in the MRP. The permittee has submitted information that shows survey points 113, 921, and 931 have met these requirements in the Mining and Reclamation Plan. Table 5.25.7 illustrates the drop in elevation for the years 1997 thru 2000. The changes in elevation for the three survey points are insignificant. The changes in elevation for the three points vary from -0.02 feet to -0.18 feet for the past two years. These changes are within the limits of survey accuracy. For all practical purposes, the elevation changes are zero. The permittee has demonstrated that no additional subsidence surveys are required until, or if, mining commences in these areas. There is a possibility that mining could take place in these areas in the future if the mine is re-opened. This would depend on viability of the future coal market.

### Findings:

The permittee has met the minimum requirements of the R645 Coal Rules and the Mining and Reclamation Plan for the Soldier Creek Mine.